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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,088	09/19/2006	Chung-Chung Chu	7000-424-1A	3935
27820 7590 06/04/2009 WITHROW & TERRANOVA, P.L.L.C. 100 REGENCY FOREST DRIVE SUITE 160 CARY, NC 27518				
EXAMINER				
NGUYEN, PHUNG HOANG JOSEPH				
ART UNIT		PAPER NUMBER		
2614				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/599,088

Applicant(s)

CHU ET AL.

Examiner

PHUNG-HOANG J. NGUYEN

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's amendment filed 3/5/2009 has been carefully considered and has been entered.

Claims amended: Claims 1, 3, 5-7, 12, 14 16-18 and 22 have been amended.

Claims pending: Claims 1-22 with claims 1 and 12 being independent.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

Applicant's amendment made to claims 1 and 12 to over the previous 35 USC 35 112 rejection is not complete. The "at least one of" clause for either acceptable actions (sending or receiving) leaves a structural gap. How is it possible to send the information from the given node to "at last one other node" if sending action is only action without the receiving action? With this gap, how is it possible for the given node to continue sending information if it does not receive the feedback from the receiving node?

Removal of "the first and the second information language" (Remark, page 6) does not completely heal the deficiency of "at least one of" clause. The gap remains.

All dependent claims inherit this deficiency.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Lumelsky et al (US Pat 6,463,454).

Claims 1 and 12, Lumelsky teaches a communication node and method of determining functions to provide at a given node forming part of a communication path (col. 6, ll. 21-28 and fig. 4) comprising:

at least one of:

sending from the given node (*Client 110, 11 and 112 of fig. 4, such as web browser*) information identifying at least one of:

one or more local functions (*a set criteria, col. 6, l. 28 or certain criteria, col. 6, l. 44*) capable of being provided to traffic in the communication path by the given node (*managing the distribution and placement of requests onto servers as well as managing the placement of content onto servers, col. 6, ll. 53-55*); and

if available, one or more remote functions capable of being provided to the traffic by other nodes (*intermediate control node 520 or servers 1201, 1211, 1221 of fig. 4, such as media/web server*) forming

part of the communication path (*managing the distribution and placement of requests onto servers as well as managing the placement of content onto servers, col. 6, ll. 53-55*); and

receiving information from at least one other node forming part of the communication path, the information identifying the one or more remote functions (*Intermediate controller 520 with the Requesting processing module to process the receiving request 601-604 and examining the stream of the requests 605 of fig. 5; col. 12, ll. 4-5*); and determining whether any of the one or more local functions should be applied to the traffic based on criteria (*the demand analysis module 680 will compute the demand statistics, examining the request to increase the confidence and accuracy of its estimates, col. 17, ll. 32-51*), which defines how the one or more local and remote functions are applied by the given node and other nodes and is available to the given node and other nodes.

Claims 2 and 13, Lumelsky teaches applying to the traffic any of the one or more local functions, which are determined to be applied to the traffic (*managing the distribution and placement of requests onto servers as well as managing the placement of content onto servers, col. 6, ll. 53-55; or An application invokes RSVP to request a specific end-to-end QoS for a data stream. RSVP aims to efficiently set up guaranteed QoS resource reservations which will support unicast and multicast routing protocols, col. 12, ll. 26-30*);

Claims 3, 5, 14 and 15, Lumelsky teaches received information (such as measurement and performance feedback information, control information, location

information...) is received from at least one of the other nodes that is upstream of traffic flow, and at least one of the other nodes that is downstream of the traffic flow (*whereas File Transfer Protocol (FTP) permits the movement of content at the best possible effort in a pipe between servers, the RSVP permits the specification of the pipe in an integrated services network, col. 12, ll. 49-52*).

Claims 4 and 15, Lumelsky teaches the at least one of the other nodes that is upstream of the traffic flow is a most proximate node upstream of traffic flow, and the at least one of the other nodes that is downstream of the traffic flow is a most proximate node downstream of the traffic flow (*intermediate control node between clients and servers of fig. 4 is considered to be the most proximate node between the clients and servers when uploading or downloading traffic is utilized the FTP protocol*).

Claims 6 and 17, Plumelsky teaches the criteria is further based on a location of one or more other nodes relative to the given node (*server directory (656) operate in conjunction to determine the willingness of any such location (holding a replica) to consider new placement inquiries (620), col. 9, line 67 – col. 10, line 4*).

Claims 7 and 18, Plumelsky teaches the received information identifies one or more remote nodes associated with each of the one or more remote functions (*the controller (520) further includes a negotiator module (630) provided for choosing one or more tentative placements (620) and executing a query strategy to query the servers associated with those tentative placements, col. 11, ll. 24-28*).

Claims 8 and 19, Lumelsky teaches at least one of the one or more local and remote functions is associated with an attribute, which is sent or received with the one

or more local and remote functions, the criteria defining how at least one of the one or more local and remote functions are applied based on the attribute *(the controller could group clients having attributes or characteristics and use this criteria to aid in the placement of such similar requests, Col. 18, ll. 8-11)*.

Claims 9 and 20, Plumelsky teaches the traffic is voice traffic *(multimedia streaming over world wide web, Col. 9, ll. 32-33)*.

Claims 10 and 21, Plumelsky teaches the given node is at least one of the group consisting of a terminal, an access point, an endpoint *(clients 110, 111, 112 and servers 1201, 1211 and 1221 of fig. 4)*, a gateway, and a routing node *(the placement module (610) operates in conjunction with the placement management interface (673) to compose and forward the placement inquiries (620), according to a placement (615) or exploration policy (635), to one or more of such willing and capable locations, col. 11, ll. 50-55)*.

Claims 11 and 22, Plumelsky teaches wherein certain of the one or more local functions and certain of the one or more remote functions are identical, the criteria defining selection indicia determining which of *[[the]]* one or more local and remote nodes is given priority *(simultaneous exploration of servers and replicas may result in the same request being mapped onto different servers, col. 16, ll. 25-27. The mapping implies that the different servers should have some basic identical configuration to receive the same request or function. Intermediate node 520 appears to have the priority in executing the routing protocol)*.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. Examiner respectfully reemphasizes that applicant has failed to completely correct the second paragraph of 35 U.S.C. 112 required in the previous office action. Thus applicant has left the entire application in a level of deficiency of gap between the necessary structural connections. Failure to make the required correction will lead to the 112, 1st paragraph for (un)enablement in the future. Subsequently, the argument applicant made against the previous arts (Segura and Nguyen) remains unpersuasive. Segura and Nguyen will be used in future prosecution.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUNG-HOANG J. NGUYEN whose telephone number is (571)270-1949. The examiner can normally be reached on Monday to Thursday, 8:30AM - 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 571 272 7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CURTIS KUNTZ/
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/Phung-Hoang J Nguyen/
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